Safety Instructions
Liquiline CM82 and CM72

Supplement to:
BA01797C and BA01845C

Safety instructions for electrical apparatus in explosion-hazardous areas
Liquidline CM82 and CM72
Liquiline CM82 and CM72

Supplement to:
BA01797C and BA01845C

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**Control Drawing**

No. 422474 Rev A (CSA)

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**CM82/CM72 and sensor in explosive gas atmosphere**

- **1 Sensor**
- **2 Liquiline CM82/CM72**
- **3 Intrinsic safe (Ex ia) supply and signal circuit**
- **4 Programmable logic controller etc.**

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**CM82/CM72 in explosive dust/fiber atmosphere, sensor in explosive gas atmosphere**

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**CM82/CM72 Current output: Wires BU+, WH**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. input voltage $U_i$</td>
<td>30 V</td>
</tr>
<tr>
<td>Max. input current $I_i$</td>
<td>100 mA</td>
</tr>
<tr>
<td>Max. input power $P_i$</td>
<td>750 mW</td>
</tr>
<tr>
<td>Max. internal capacity $C_i$</td>
<td>7 nF (including 15 m cable)</td>
</tr>
<tr>
<td>Max. internal inductance $L_i$</td>
<td>Max. internal inductance $L_i$</td>
</tr>
</tbody>
</table>

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**CM82/CM72 Memosens interface**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. output $P_o$</td>
<td>105 mW</td>
</tr>
</tbody>
</table>

For connection to certified Memosens sensors with input parameter $P_i$.

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**Warning:**

- The measurement transmitters CM82 and CM72 and their connectors must be protected against electrostatic charge.
- The process temperature of the sensor depends on its temperature class and may be different from the CM82/CM72 ambient temperature range. Uncoupling of the CM82/CM72 temperature and the process temperature needs to be guaranteed by appropriate measures.
- Installation, connection to the electricity supply, commissioning, inspection, maintenance and repair of the devices must be carried out by qualified specialists trained to work on Ex-rated devices according to applicable codes of practice and according to the operating instructions.
- Certified measurement transmitters CM82/CM72 bear a red ring.
- Only sensors, intended for use according to the operating instructions may be connected.
- Suitable Memosens sensors, which may be arranged in Zone 0 or Class I, Div.2 bear a red ring.
- The rated values of input and output circuits shall be complied with.
- The transmitter may only be connected to a suitable power supply.
- Maintenance and repair work may only be carried out by service staff or specially trained and authorized personnel.

Class I/II/III, Division 1, Group A, B, C, D / E, F, G T6/T4; Type 6
Class I, Zone 0, AEx/Ex ia IIC, T6/T4 Ga; Type 6
Ex ia III C T85°C/T135°C Db
Class I, Zone 21, AEx ia III C T85°C/T135°C Db
Tamb: -20°<Ta<+55°C(T6)/+80°C(T4)

Control Drawing 422474 Rev A
Valid for USA and Canada.